

November 26, 2008

MEMORANDUM

TO: Mr. Steve Murray, P.L.S. - Tippecanoe County Surveyor

FROM: David W. Eichelberger, P.E. - CBBEL, Indianapolis

PROJECT: **Latter Day Saints of Lafayette
CBBEL Project No. 02-038 (HS)**

DEVELOPER/OWNER: **Snapp and Associates**

LOCATION: **40° 21' 14" Latitude
-86° 50' 18" Longitude**

RECOMMENDATION: **Final Approval with Conditions**

A building with adjacent paved parking will be constructed on approximately 6.0 undeveloped acres located north of County Road 450 South and east of County Road 250 East (Concord Road) near the city of Lafayette. An access drive will be constructed from County Road 450 South. Under existing conditions, the grassy field drains northerly to the off-site J.N. Kirkpatrick Regulated Drain; a 0.75-acre wetland has been delineated in the southeast portion of the project site. Upon completion of the proposed project, runoff from paved surfaces will sheet flow through curb turnouts into drainage swales along the south and west sides of the property. Runoff east of the proposed building will drain to a constructed wetland and a storm sewer inlet. A stormwater detention pond will be constructed at the north end of the project site to accept all on-site runoff prior to discharging directly into the J.N. Kirkpatrick Regulated Drain via an off-site storm sewer.

The proposed project will have a direct outlet to the J.N. Kirkpatrick Regulated Drain. The proposed detention pond outlet will encroach into the J.N. Kirkpatrick Regulated Drain easement. The project site is not located within the Tippecanoe County MS4 Area, but is located within the Elliott Ditch 305(b) Priority Watershed.

This project was previously reviewed in a memorandum dated November 17, 2008. After a review of the most recently provided information, CBBEL recommends final approval of the stormwater management plan with the following conditions:

Variances/Encroachments

1. The applicant must coordinate the encroachment of the J.N. Kirkpatrick Regulated Drain with the Tippecanoe County Surveyor's Office. This encroachment also will require final approval from the Tippecanoe County Drainage Board.

Stormwater Quantity

1. The applicant should submit a signed copy of the Notice of Intent (N.O.I) and a copy of the proof of publication.

2. All proposed work in the electric transformer utility easement traversing the northwest corner of the project site must be approved by the easement owner. A copy of written approval must be provided before drainage approval can be granted.
3. All work outside the boundaries of the project area should be approved by the adjacent property owner. A copy of written approval must be provided before drainage approval can be granted.
4. The emergency stormwater routing plan must be revised to contain the emergency overflow to the site and prevent overflow onto adjoining property owners to the east and west. The existing site runoff route is to the north flowing in the general location of the proposed storm sewer outlet. The emergency overflow should follow this path through the north detention basin.

Stormwater Quality

1. The flow rate used for sizing the Stormceptor unit should be based on the tributary area to the unit, calculated using the methodology found in Chapter 9 of the Standards. It appears that the flow rate used for sizing the unit was based on the release rate from the north detention basin.
2. A final separately bound BMP Operations and Maintenance Manual should be provided containing all revisions.
3. An approval letter from IDEM authorizing wetland disturbance and any required mitigation of this disturbance must be provided before final drainage approval can be granted.
4. All off-site work associated with the pond outlet pipe should be shown with appropriate erosion/sediment control measures on the Storm Water Pollution Prevention Plan.
5. Page 1 of the submitted "Recorded Master Covenant and Agreement Regarding On-Site BMP Maintenance and Drainage" should be revised to also include swales, wetland, and storm sewer. The agreement should be signed, dated, and notarized. This agreement must be recorded before final plan approval and sign-off will be granted by the Tippecanoe County Surveyor's Office.

General Conditions

1. The applicant must present the project at the Tippecanoe County Drainage Board meeting for the project to be considered for approval.
2. A final set of certified plans and a certified drainage report with all revisions must be submitted.
3. Final construction plans shall be signed by the Tippecanoe County Surveyor. The number of plan sets to be signed will be determined by the Tippecanoe County Surveyor's Office.

4. No site work of any type shall start on this project without a pre-construction meeting with the Tippecanoe County Surveyor's Office.
5. The applicant should obtain approval from the Tippecanoe County Highway Department for all work proposed within future right-of-way areas and for all work within the County Road 450 South Right-of-Way.
6. The applicant must pay any final drainage review fees per Ordinance 2005-04-CM and submit a letter to the County Surveyor's Office stating that these fees will be paid.
7. The applicant must pay the Phase II stormwater program fees.
8. If no assurance is required under the Unified Subdivision Ordinance, Section 4.1, the Comprehensive Stormwater Management Ordinance of Tippecanoe County (Ordinance) still requires an assurance, made out to the Tippecanoe County Drainage Board, for an amount equal to 100% of the total costs of implementing measures required by Chapters 3, 4, and 5 of the Ordinance. See Chapter 6, Section 7 of the Ordinance for more information.
9. The property owner, developer, or contractor shall be required to file a three-year maintenance bond or other acceptable guarantee with the Tippecanoe County Drainage Board, prior to final approval, in an amount not to exceed ten percent (10%) of the cost of the stormwater drainage system located outside the public road right-of-ways. See Chapter 6, Section 9 of the Ordinance for more information.
10. All listed issues must be completely addressed before final plan approval and sign-off will be granted by the County Surveyor's Office.

No error or omission in the plans, calculations or applications (whether said plans, calculations or applications have been reviewed by the review engineer or not) shall permit or release the applicant and designer from constructing this work in any other manner than that provided for in the County Ordinance.

pc: The Schneider Corporation

DWE/sb

M02-038HS2.DOC